Missouri High School Survey
10-year Trend Analysis Report

Total
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

| 11.9 | | 11.4 | 8.1 | 9.0 | 8.5 | Decreased, 2009-2019 | Not available[§] | No change |

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

| 24.6 | | 19.3 | 18.5 | 15.7 | 15.8 | Decreased, 2009-2019 | Not available | No change |

QN10: Percentage of students who drove a car or other vehicle when they had been drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

| | | 8.9 | 6.8 | 5.3 | 4.2 | Decreased, 2013-2019 | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN11: Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)								
		46.0	47.0	46.4	45.8	No linear change	Not available[§]	No change
QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)								
16.0		22.2	22.1	19.8	18.8	No linear change	Not available	No change
QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)								
			5.9	4.2	4.6	No linear change	Not available	No change
QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)								
			6.1	6.4	6.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)

				2017	2019			
				19.7	24.7	No linear change	Not available[§]	No change

QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)

2009		2013	2015	2017	2019			
8.1		10.2	8.4	10.2	10.0	No linear change	Not available	No change

QN22: Percentage of students who experienced physical dating violence (being physically hurt on purpose by someone they were dating or going out with [counting such things as being hit, slammed into something, or injured with an object or weapon] one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)

		2013	2015	2017	2019			
		9.6	11.7	10.4	8.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)

22.8		25.2	21.4	23.3	21.0	No linear change	Not available[§]	No change

QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)

			16.6	19.4	18.1	No linear change	Not available	No change

QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)

27.1		27.3	27.5	31.3	32.7	Increased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)								
15.4		14.2	16.2	20.9	17.4	Increased, 2009-2019	Not available[§]	No change
QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)								
11.3		12.1	13.4	15.5	13.6	Increased, 2009-2019	Not available	No change
QN28: Percentage of students who attempted suicide (one or more times during the 12 months before the survey)								
6.4		6.9	9.8	8.6	8.3	No linear change	Not available	No change
QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)								
2.5		1.9	3.2	2.9	2.5	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)								
				9.8	9.3	No linear change	Not available[§]	No change
QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)								
18.9		14.9	11.0	9.2	6.5	Decreased, 2009-2019	Not available	No change
QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)								
6.8		5.5	4.2	2.7	1.1	Decreased, 2009-2019	Not available	Decreased
QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)								
5.5		3.9	3.1	2.0	0.9	Decreased, 2009-2019	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])								
			40.6	39.9	49.6	Increased, 2015-2019	Not available[§]	Increased
QN35: Percentage of students who currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo], on at least 1 day during the 30 days before the survey)								
			22.0	10.9	20.7	No linear change	Not available	Increased
QNFREVP: Percentage of students who currently used electronic vapor products frequently (on 20 or more days during the 30 days before the survey)								
			2.8	2.7	9.4	Increased, 2015-2019	Not available	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDAYEVP: Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)								
			1.8	2.1	6.9	Increased, 2015-2019	Not available[§]	Increased
QNTB5: Percentage of students who currently smoked cigarettes or used electronic vapor products (on at least 1 day during the 30 days before the survey)								
			26.1	16.3	22.8	No linear change	Not available	Increased
QN36: Percentage of students who usually got their own electronic vapor products by buying them in a store (such as a convenience store, supermarket, discount store, gas station, or vape store, during the 30 days before the survey, among students who currently used electronic vapor products and who were aged <18 years)								
			13.2	7.0		No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)

				6.1	5.5	No linear change	Not available[§]	No change

QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)

13.5		13.3	12.1	9.2	5.4	Decreased, 2009-2019	Not available	Decreased

QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)

24.2		21.0	17.6	13.2	9.0	Decreased, 2009-2019	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN39: Percentage of students who tried to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products, ever during the 12 months before the survey, among students who used any tobacco products during the 12 months before the survey)

				38.0	49.3	Increased, 2017-2019	Not available[§]	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips)								
20.4		19.5	17.3	18.4	16.0	No linear change	Not available[§]	No change
QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)								
39.3		35.6	34.5	32.0	27.9	Decreased, 2009-2019	Not available	No change
QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey)								
			17.0	15.2		No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol)								
41.0		34.0	39.9	42.4	40.2	No linear change	Not available[§]	No change
QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)								
20.6		20.5	16.3	19.9	16.3	No linear change	Not available	No change
QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)								
				13.7	22.7	Increased, 2017-2019	Not available	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)								
				4.1	2.4	No linear change	Not available[§]	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Sexual Behaviors

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN58: Percentage of students who ever had sexual intercourse

48.7		43.1	37.7	41.9	44.3	Decreased, 2009-2019	Not available[§]	No change

QN59: Percentage of students who had sexual intercourse for the first time before age 13 years

5.7		3.9	4.1	2.5	4.6	No linear change	Not available	No change

QN61: Percentage of students who were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)

35.5		32.4	27.5	32.3	33.2	No linear change	Not available	No change

QN62: Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)

23.3		20.7	20.4	15.5	20.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN63: Percentage of students who used a condom during last sexual intercourse (among students who were currently sexually active)

| 59.8 | | 58.1 | 56.4 | 51.0 | 56.4 | No linear change | Not available[§] | No change |

QN64: Percentage of students who used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)

| 24.3 | | 16.0 | 22.9 | 23.7 | 27.4 | No linear change | Not available | No change |

QNIUDIMP: Percentage of students who used an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)

| | | 3.5 | 4.6 | 3.9 | 5.6 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNSHPARG: Percentage of students who used a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active))								
		4.8	5.6	6.7	7.2	No linear change	Not available[§]	No change
QNOTHHPL: Percentage of students who used birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		24.4	33.0	34.3	40.2	Increased, 2013-2019	Not available	No change
QNDUALBC: Percentage of students who used both a condom during last sexual intercourse and birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		9.5	12.7	12.0	12.8	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNBCNONE: Percentage of students who did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)								
8.4		16.2	12.1	12.7	8.2	No linear change	Not available[§]	No change
QN84: Percentage of students who were ever tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)								
				13.7	8.4	Decreased, 2017-2019	Not available	Decreased

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNOWT: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]								
14.3		15.5	13.3	15.7	16.1	No linear change	Not available[¶]	No change
QNOBESE: Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]								
14.3		14.9	13.1	16.9	18.4	Increased, 2009-2019	Not available	No change
QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)								
26.0		29.2	31.3	34.3	34.5	Increased, 2009-2019	Not available	No change
QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)								
13.3		14.3	12.8	13.8	14.0	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
7.1		7.6	6.6	7.9	7.3	No linear change	Not available[§]	No change
QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
55.9		55.0	53.6	50.5	51.0	Decreased, 2009-2019	Not available	No change
QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
27.8		24.6	24.1	23.1	20.3	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)

| 37.1 | | 41.5 | 43.6 | 45.7 | 42.8 | Increased, 2009-2019 | Not available[§] | No change |

QN72: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey)

| 29.0 | | 27.9 | 34.5 | 33.8 | 36.6 | Increased, 2009-2019 | Not available | No change |

QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)

| 53.0 | | 54.5 | 54.8 | 58.4 | 53.0 | No linear change | Not available | No change |

QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)

| 16.7 | | 21.7 | 17.7 | 19.6 | 17.7 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNVEG0: Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)								
6.7		6.3	6.1	8.4	6.5	No linear change	Not available[§]	No change
QNVEG1: Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)								
62.5		58.5	58.0	55.4	59.3	Decreased, 2009-2019	Not available	No change
QNVEG2: Percentage of students who ate vegetables two or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)								
28.5		24.2	21.8	21.9	26.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNVEG3: Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)								
14.3		11.5	10.5	9.6	10.4	Decreased, 2009-2019	Not available[§]	No change
QN76: Percentage of students who did not drink milk (during the 7 days before the survey)								
16.7		18.1	20.8	26.0	26.0	Increased, 2009-2019	Not available	No change
QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)								
44.5		38.0	36.0	28.8	26.2	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

15.8		11.3	10.4	6.8	7.0	Decreased, 2009-2019	Not available[§]	No change

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

		14.2	15.5	14.6	15.4	No linear change	Not available	No change

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

		35.6	30.9	32.2	27.7	Decreased, 2013-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Physical Activity

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN78: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)

		45.4	45.7	46.2	48.0	No linear change	Not available[§]	No change

QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)

		17.1	16.4	16.7	13.5	No linear change	Not available	No change

QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)

		27.2	26.0	28.6	25.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

**Total
Physical Activity**

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN79: Percentage of students who watched television 3 or more hours per day (on an average school day)

| 32.4 | | 25.6 | 21.2 | 21.1 | 19.8 | Decreased, 2009-2019 | Not available[§] | No change |

QN80: Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)

| 22.9 | | 32.7 | 37.4 | 42.3 | 42.5 | Increased, 2009-2019 | Not available | No change |

QN81: Percentage of students who attended physical education (PE) classes on 1 or more days (in an average week when they were in school)

| 44.4 | | 46.1 | 46.0 | 49.5 | 52.7 | Increased, 2009-2019 | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

**Total
Physical Activity**

	Health Risk Behavior and Percentages					**Linear Change**[*]	**Quadratic Change**[*]	**Change from 2017-2019** [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNDLYPE: Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)

| 33.1 | | 30.9 | 23.0 | 28.6 | 26.9 | No linear change | Not available[§] | No change |

QN83: Percentage of students who had a concussion from playing a sport or being physically active (one or more times during the 12 months before the survey)

| | | | | 16.0 | 19.2 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total
Other

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN86: Percentage of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, during the 12 months before the survey)								
			69.2	69.9	68.5	No linear change	Not available[§]	No change
QNNODNT: Percentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)								
			2.8	2.3	2.9	No linear change	Not available	No change
QN87: Percentage of students who had ever been told by a doctor or nurse that they had asthma								
20.6		24.1	22.0	26.7	23.8	Increased, 2009-2019	Not available	No change
QN88: Percentage of students who got 8 or more hours of sleep (on an average school night)								
			27.4	20.3	21.8	Decreased, 2015-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

**Total
Site-Added**

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN90: Percentage of students who rarely or never wear a seat belt when driving (among students who drive a car)

		10.6	7.0	8.9	7.3	No linear change	Not available[§]	No change

QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)

				65.1	63.7	No linear change	Not available	No change

QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex

				5.6	4.0	No linear change	Not available	No change

QN94: Percentage of students who tried to quit smoking cigarettes (among students who smoked cigarettes during the 12 months before the survey)

		49.3	50.8	58.3		No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

**Total
Site-Added**

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN95: Percentage of students who used electronic-vapor products mainly because a friend or family member used them

				7.3	8.2	No linear change	Not available[§]	No change

QN97: Percentage of students who have ever participated in a program to help them quit using tobacco (among students who have used tobacco)

		11.5	14.1	9.3	13.9	No linear change	Not available	No change

QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco

		4.0	2.8	4.1	4.6	No linear change	Not available	No change

QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)

			28.7	30.9	24.3	No linear change	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total Site-Added

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)

			32.3	36.6	27.4	No linear change	Not available[§]	Decreased

QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)

			48.6	50.6	40.2	Decreased, 2015-2019	Not available	Decreased

QN102: Percentage of students who breathed the smoke from someone who was smoking tobacco products in the place where they worked (on at least one day during the 7 days before the survey, among students who worked during the 7 days before the survey)

			21.1	27.1	22.0	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

**Total
Site-Added**

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work

			86.0	87.7	77.7	Decreased, 2015-2019	Not available[§]	Decreased

QN110: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma

11.6		12.1	11.1	13.2	12.6	No linear change	Not available	No change

QN111: Percentage of students who have ever been taught by a nurse or doctor how to take care of or manage their asthma (among students who have ever had asthma)

		53.8	53.0	56.6	52.1	No linear change	Not available	No change

QN112: Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not counting getting a spray-on tan], one or more times during the 12 months before the survey)

			13.3	13.0	15.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN113: Percentage of students who had a sunburn (counting even a small part of the skin turning red or hurting for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)								
			53.7	60.3		Increased, 2017-2019	Not available[§]	No change
QN115: Percentage of students who most of the time or always get the kind of help they need (among students who report having felt sad, empty, hopeless, angry, or anxious)								
			26.0	26.0	21.7	Decreased, 2015-2019	Not available	No change
QN116: Percentage of students who ate dinner at home with at least one of their parents on four or more days (during the 7 days before the survey)								
			61.9	58.5	62.4	No linear change	Not available	No change
QN117: Percentage of students who strongly agree or agree that their teachers really care about them and give them a lot of encouragement								
			59.2	62.0	58.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Total Site-Added

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN118: Percentage of students who participate in school activities one or more hours (such as sports, band, drama, or clubs, during an average week when they are in school)

| | | | 67.8 | 65.5 | 68.2 | No linear change | Not available[§] | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

| 15.1 | | 13.5 | 11.9 | 12.0 | 9.0 | Decreased, 2009-2019 | Not available[§] | No change |

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

| 25.6 | | 19.2 | 19.9 | 16.6 | 15.9 | Decreased, 2009-2019 | Not available | No change |

QN10: Percentage of students who drove a car or other vehicle when they had been drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

| | | 10.8 | 7.7 | 6.6 | 4.9 | Decreased, 2013-2019 | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN11: Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

| | | 46.5 | 46.7 | 44.5 | 48.3 | No linear change | Not available[§] | No change |

QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| 25.7 | | 33.2 | 33.8 | 27.8 | 27.8 | No linear change | Not available | No change |

QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| | | 9.1 | 5.5 | 5.9 | | No linear change | Not available | No change |

QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)

| | | 8.0 | 7.3 | 7.1 | | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)								
				24.2	32.4	Increased, 2017-2019	Not available[§]	Increased
QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)								
4.4		5.2	4.7	7.1	5.3	No linear change	Not available	No change
QN22: Percentage of students who experienced physical dating violence (being physically hurt on purpose by someone they were dating or going out with [counting such things as being hit, slammed into something, or injured with an object or weapon] one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)								
		7.4	12.9	8.8	8.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)

| 21.2 | | 20.0 | 19.6 | 19.5 | 17.3 | No linear change | Not available[§] | No change |

QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)

| | | | 11.7 | 14.8 | 14.3 | No linear change | Not available | No change |

QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)

| 21.3 | | 16.7 | 23.6 | 24.2 | 24.0 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
10.6		10.1	13.2	17.5	14.5	Increased, 2009-2019	Not available[§]	No change

QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)

| 8.6 | | 7.5 | 11.0 | 14.2 | 13.1 | Increased, 2009-2019 | Not available | No change |

QN28: Percentage of students who attempted suicide (one or more times during the 12 months before the survey)

| 5.0 | | 5.4 | 9.2 | 8.3 | 6.9 | No linear change | Not available | No change |

QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)

| 1.6 | | 1.0 | 3.1 | 3.2 | 1.8 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)

				10.4	10.0	No linear change	Not available[§]	No change

QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)

18.8		16.1	13.7	10.2	6.8	Decreased, 2009-2019	Not available	No change

QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)

7.0		5.7	5.7	2.9	0.7	Decreased, 2009-2019	Not available	Decreased

QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)

6.3		4.4	4.4	2.2	0.7	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])								
			46.7	40.4	49.7	No linear change	Not available[§]	No change
QN35: Percentage of students who currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo], on at least 1 day during the 30 days before the survey)								
			27.7	13.6	23.1	No linear change	Not available	Increased
QNFREVP: Percentage of students who currently used electronic vapor products frequently (on 20 or more days during the 30 days before the survey)								
			4.4	3.4	10.8	Increased, 2015-2019	Not available	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDAYEVP: Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)								
			2.5	2.5	8.4	Increased, 2015-2019	Not available[§]	Increased
QNTB5: Percentage of students who currently smoked cigarettes or used electronic vapor products (on at least 1 day during the 30 days before the survey)								
			31.2	18.9	25.4	No linear change	Not available	No change
QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)								
				8.1	9.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)								
16.3		17.0	17.1	11.4	6.5	Decreased, 2009-2019	Not available[§]	Decreased
QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)								
25.3		23.6	22.8	15.9	10.1	Decreased, 2009-2019	Not available	Decreased
QN39: Percentage of students who tried to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products, ever during the 12 months before the survey, among students who used any tobacco products during the 12 months before the survey)								
				36.4	49.0	Increased, 2017-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips)								
25.8		22.6	20.5	19.9	17.0	Decreased, 2009-2019	Not available[§]	No change
QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)								
39.5		33.8	34.8	27.5	24.7	Decreased, 2009-2019	Not available	No change
QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey)								
			14.8	13.4		No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 †
2009	2011	2013	2015	2017	2019			

QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
36.5		28.8	35.4	36.6	39.9	No linear change	Not available§	No change

QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
22.7		23.7	20.0	19.8	16.7	Decreased, 2009-2019	Not available	No change

QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				14.0	22.2	Increased, 2017-2019	Not available	Increased

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
†Based on t-test analysis, $p < 0.05$.
§Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				3.7	2.9	No linear change	Not available[§]	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN58: Percentage of students who ever had sexual intercourse								
50.2		45.4	41.2	41.2	44.6	Decreased, 2009-2019	Not available[§]	No change
QN59: Percentage of students who had sexual intercourse for the first time before age 13 years								
7.9		5.4	5.3	3.6	5.9	No linear change	Not available	No change
QN61: Percentage of students who were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)								
34.9		32.9	29.2	28.9	32.4	No linear change	Not available	No change
QN62: Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)								
27.3		23.5	22.4	17.0	24.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Sexual Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN63: Percentage of students who used a condom during last sexual intercourse (among students who were currently sexually active)								
68.7		64.3	59.8	53.0	65.0	No linear change	Not available[§]	No change
QN64: Percentage of students who used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
21.7		14.5	18.8	18.9	23.7	No linear change	Not available	No change
QNIUDIMP: Percentage of students who used an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		1.8	4.1	1.3	5.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNSHPARG: Percentage of students who used a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active))								
		1.7	2.5	6.1	3.7	No linear change	Not available[§]	No change
QNOTHHPL: Percentage of students who used birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		18.1	25.4	26.3	32.5	Increased, 2013-2019	Not available	No change
QNDUALBC: Percentage of students who used both a condom during last sexual intercourse and birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		9.1	10.9	7.6	10.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Sexual Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNBCNONE: Percentage of students who did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)

| 8.0 | | 13.5 | 13.0 | 9.8 | 6.4 | No linear change | Not available[§] | No change |

QN84: Percentage of students who were ever tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)

| | | | | 14.8 | 5.9 | Decreased, 2017-2019 | Not available | Decreased |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**				

QNOWT: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

14.7		14.7	14.3	15.3	15.2	No linear change	Not available[¶]	No change

QNOBESE: Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

18.2		18.5	15.9	19.0	22.7	No linear change	Not available	No change

QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)

27.1		27.6	28.1	30.0	30.6	No linear change	Not available	No change

QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)

15.5		16.0	14.3	15.7	16.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
8.6		8.5	7.4	8.4	8.7	No linear change	Not available[§]	No change
QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
54.0		57.2	55.1	53.9	52.1	No linear change	Not available	No change
QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
26.7		26.7	24.8	23.4	19.7	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019[†]
2009	2011	2013	2015	2017	2019			

QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
41.7		45.0	48.5	51.0	47.8	Increased, 2009-2019	Not available[§]	No change

QN72: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
26.7		25.2	32.6	33.4	32.8	Increased, 2009-2019	Not available	No change

QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
52.9		51.7	52.8	57.1	54.0	No linear change	Not available	No change

QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
19.6		21.6	18.9	21.8	19.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNVEG0: Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

8.6		6.1	6.8	9.0	7.3	No linear change	Not available[§]	No change

QNVEG1: Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

60.7		60.9	60.2	55.8	59.8	No linear change	Not available	No change

QNVEG2: Percentage of students who ate vegetables two or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

29.6		24.2	23.5	23.5	26.9	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNVEG3: Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| 16.3 | | 10.7 | 12.1 | 11.0 | 10.1 | Decreased, 2009-2019 | Not available[§] | No change |

QN76: Percentage of students who did not drink milk (during the 7 days before the survey)

| 14.0 | | 13.8 | 14.8 | 20.9 | 18.1 | Increased, 2009-2019 | Not available | No change |

QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| 52.1 | | 45.2 | 44.8 | 35.1 | 33.1 | Decreased, 2009-2019 | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
20.2		16.0	13.8	8.5	10.4	Decreased, 2009-2019	Not available[§]	No change

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		15.5	15.6	17.9	17.5	No linear change	Not available	No change

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		36.9	31.7	30.6	30.7	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Physical Activity

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN78: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		54.2	51.9	52.7	50.1	No linear change	Not available[§]	No change
QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		14.2	13.5	15.5	11.5	No linear change	Not available	Decreased
QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		36.2	33.5	35.5	29.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Physical Activity

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN79: Percentage of students who watched television 3 or more hours per day (on an average school day)

35.0		26.8	18.1	20.0	18.6	Decreased, 2009-2019	Not available[§]	No change

QN80: Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)

29.1		33.5	37.1	41.8	45.1	Increased, 2009-2019	Not available	No change

QN81: Percentage of students who attended physical education (PE) classes on 1 or more days (in an average week when they were in school)

54.8		53.5	55.6	56.4	58.7	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Physical Activity

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNDLYPE: Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
40.4		37.0	28.2	32.3	28.7	No linear change	Not available[§]	No change

QN83: Percentage of students who had a concussion from playing a sport or being physically active (one or more times during the 12 months before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				17.8	20.5	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Other

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN86: Percentage of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, during the 12 months before the survey)

			65.4	67.5	67.0	No linear change	Not available[§]	No change

QNNODNT: Percentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)

			3.8	2.5	3.1	No linear change	Not available	No change

QN87: Percentage of students who had ever been told by a doctor or nurse that they had asthma

21.6		21.5	23.5	27.7	23.1	No linear change	Not available	No change

QN88: Percentage of students who got 8 or more hours of sleep (on an average school night)

			29.4	20.2	22.0	Decreased, 2015-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN90: Percentage of students who rarely or never wear a seat belt when driving (among students who drive a car)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		13.3	10.2	12.1	7.3	Decreased, 2013-2019	Not available[§]	No change

QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				58.9	57.6	No linear change	Not available	No change

QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				6.1	3.3	No linear change	Not available	No change

QN95: Percentage of students who used electronic-vapor products mainly because a friend or family member used them

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				5.2	7.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN97: Percentage of students who have ever participated in a program to help them quit using tobacco (among students who have used tobacco)								
		14.3	16.4	10.4	14.4	No linear change	Not available[§]	No change
QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco								
		4.8	3.9	5.6	4.5	No linear change	Not available	No change
QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)								
			32.1	29.4	22.9	Decreased, 2015-2019	Not available	Decreased
QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)								
			32.0	33.6	26.3	No linear change	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Site-Added

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)

			45.4	43.2	33.0	Decreased, 2015-2019	Not available[§]	Decreased

QN102: Percentage of students who breathed the smoke from someone who was smoking tobacco products in the place where they worked (on at least one day during the 7 days before the survey, among students who worked during the 7 days before the survey)

			27.0	29.1	23.0	No linear change	Not available	No change

QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work

			82.1	85.6	74.6	Decreased, 2015-2019	Not available	Decreased

QN110: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma

10.4		7.9	9.9	11.2	9.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN111: Percentage of students who have ever been taught by a nurse or doctor how to take care of or manage their asthma (among students who have ever had asthma)

		47.3	49.9	48.3	50.5	No linear change	Not available[§]	No change

QN112: Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not counting getting a spray-on tan], one or more times during the 12 months before the survey)

		8.2	8.1	11.1		No linear change	Not available	No change

QN113: Percentage of students who had a sunburn (counting even a small part of the skin turning red or hurting for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)

				48.3	57.4	Increased, 2017-2019	Not available	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Male
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN115: Percentage of students who most of the time or always get the kind of help they need (among students who report having felt sad, empty, hopeless, angry, or anxious)								
			22.8	20.9	19.7	No linear change	Not available[§]	No change
QN116: Percentage of students who ate dinner at home with at least one of their parents on four or more days (during the 7 days before the survey)								
			60.6	58.9	61.1	No linear change	Not available	No change
QN117: Percentage of students who strongly agree or agree that their teachers really care about them and give them a lot of encouragement								
			56.0	65.3	59.0	No linear change	Not available	No change
QN118: Percentage of students who participate in school activities one or more hours (such as sports, band, drama, or clubs, during an average week when they are in school)								
			64.4	64.1	65.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Injury and Violence

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

8.6		9.0	4.4	5.9	7.8	No linear change	Not available[§]	No change

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

23.4		19.4	16.8	14.7	15.5	Decreased, 2009-2019	Not available	No change

QN10: Percentage of students who drove a car or other vehicle when they had been drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

		6.7	5.8	3.6	3.2	Decreased, 2013-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Injury and Violence

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN11: Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

| | | 44.9 | 47.5 | 47.7 | 43.0 | No linear change | Not available[§] | No change |

QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| 5.9 | | 10.6 | 10.8 | 11.5 | 9.4 | Increased, 2009-2019 | Not available | No change |

QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| | | | 2.9 | 2.6 | 3.0 | No linear change | Not available | No change |

QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)

| | | | 4.1 | 4.7 | 5.4 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)

				14.4	16.2	No linear change	Not available[§]	No change

QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)

12.0		15.4	11.9	13.3	14.6	No linear change	Not available	No change

QN22: Percentage of students who experienced physical dating violence (being physically hurt on purpose by someone they were dating or going out with [counting such things as being hit, slammed into something, or injured with an object or weapon] one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)

		11.6	10.2	11.4	8.0	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)								
24.5		30.4	22.9	27.0	24.8	No linear change	Not available[§]	No change
QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)								
			21.4	23.8	21.9	No linear change	Not available	No change
QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)								
33.2		38.4	31.3	38.3	41.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Injury and Violence

Health Risk Behavior and Percentages						**Linear Change**[*]	**Quadratic Change**[*]	**Change from 2017-2019** [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)								
20.6		18.6	18.9	24.1	20.2	No linear change	Not available[§]	No change
QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)								
14.2		16.4	15.8	16.6	13.9	No linear change	Not available	No change
QN28: Percentage of students who attempted suicide (one or more times during the 12 months before the survey)								
7.9		8.0	10.3	8.4	9.3	No linear change	Not available	No change
QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)								
3.3		2.8	3.2	2.6	3.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)

				9.2	8.3	No linear change	Not available[§]	No change

QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)

19.1		13.2	8.1	8.1	6.0	Decreased, 2009-2019	Not available	No change

QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)

6.6		5.4	2.8	2.4	1.4	Decreased, 2009-2019	Not available	No change

QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)

4.8		3.4	1.8	1.8	1.0	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])								
			35.0	39.5	49.3	Increased, 2015-2019	Not available[§]	Increased
QN35: Percentage of students who currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo], on at least 1 day during the 30 days before the survey)								
			16.5	7.9	17.9	No linear change	Not available	Increased
QNFREVP: Percentage of students who currently used electronic vapor products frequently (on 20 or more days during the 30 days before the survey)								
			1.4	1.6	7.7	Increased, 2015-2019	Not available	Increased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNDAYEVP: Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)

			1.1	1.5	5.2	Increased, 2015-2019	Not available[§]	Increased

QNTB5: Percentage of students who currently smoked cigarettes or used electronic vapor products (on at least 1 day during the 30 days before the survey)

			20.9	13.5	19.6	No linear change	Not available	Increased

QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)

				3.7	1.3	Decreased, 2017-2019	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
10.5		9.3	7.1	6.8	3.9	Decreased, 2009-2019	Not available[§]	Decreased

QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
23.0		17.7	12.2	10.4	7.5	Decreased, 2009-2019	Not available	No change

QN39: Percentage of students who tried to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products, ever during the 12 months before the survey, among students who used any tobacco products during the 12 months before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
				40.5	50.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change
14.7		16.2	14.2	16.9	14.8	No linear change	Not available[§]	No change

QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change
39.1		37.4	34.3	36.1	30.9	Decreased, 2009-2019	Not available	No change

QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change
			18.8	16.6		No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 †
2009	2011	2013	2015	2017	2019			

QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol)

| 45.9 | | 39.2 | 44.2 | 47.6 | 41.0 | No linear change | Not available§ | No change |

QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)

| 18.4 | | 17.0 | 12.6 | 19.5 | 15.6 | No linear change | Not available | No change |

QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)

| | | | | 13.0 | 22.7 | Increased, 2017-2019 | Not available | Increased |

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
†Based on t-test analysis, $p < 0.05$.
§Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)

				2017	2019			
				3.7	1.3	Decreased, 2017-2019	Not available[§]	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN58: Percentage of students who ever had sexual intercourse

| 47.3 | | 40.7 | 35.1 | 42.4 | 43.9 | No linear change | Not available[§] | No change |

QN59: Percentage of students who had sexual intercourse for the first time before age 13 years

| 3.4 | | 2.4 | 2.9 | 1.2 | 3.4 | No linear change | Not available | No change |

QN61: Percentage of students who were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)

| 36.3 | | 31.9 | 26.1 | 35.6 | 33.9 | No linear change | Not available | No change |

QN62: Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)

| 19.4 | | 17.9 | 18.0 | 14.3 | 16.1 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Sexual Behaviors

	Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**				

QN63: Percentage of students who used a condom during last sexual intercourse (among students who were currently sexually active)

	Health Risk Behavior and Percentages						Linear Change	Quadratic Change	Change from 2017-2019
51.1		51.8	53.5	49.5	48.6		No linear change	Not available[§]	No change

QN64: Percentage of students who used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)

27.0		17.6	27.1	27.4	31.1		No linear change	Not available	No change

QNIUDIMP: Percentage of students who used an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)

		5.2	4.9	5.9	6.1		No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNSHPARG: Percentage of students who used a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active))								
		7.9	8.7	7.2	10.6	No linear change	Not available[§]	No change
QNOTHHPL: Percentage of students who used birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		30.8	40.7	40.5	47.8	Increased, 2013-2019	Not available	No change
QNDUALBC: Percentage of students who used both a condom during last sexual intercourse and birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		10.0	14.7	15.4	15.5	No linear change	Not available	No change

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[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QNBCNONE: Percentage of students who did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)								
8.7		18.9	10.5	14.9	10.0	No linear change	Not available[§]	No change
QN84: Percentage of students who were ever tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)								
				12.4	11.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNOWT: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
13.8		16.3	12.4	16.2	17.0	No linear change	Not available[¶]	No change

QNOBESE: Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
10.4		11.1	10.3	14.8	13.9	Increased, 2009-2019	Not available	No change

QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
25.0		31.3	34.3	38.8	38.4	Increased, 2009-2019	Not available	No change

QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
11.0		12.2	11.3	11.8	11.6	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
5.5		6.8	5.7	7.4	5.7	No linear change	Not available[§]	No change

QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
57.9		52.4	52.1	47.0	50.0	Decreased, 2009-2019	Not available	No change

QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
29.0		22.7	23.4	22.6	21.2	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)

| 32.3 | | 37.6 | 38.8 | 40.6 | 37.6 | No linear change | Not available[§] | No change |

QN72: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey)

| 31.4 | | 30.6 | 36.4 | 34.3 | 40.5 | Increased, 2009-2019 | Not available | No change |

QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)

| 53.2 | | 57.4 | 57.2 | 59.7 | 52.0 | No linear change | Not available | No change |

QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)

| 13.7 | | 21.7 | 16.1 | 17.3 | 15.8 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNVEG0: Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

4.7		6.3	5.5	7.7	5.7	No linear change	Not available[§]	No change

QNVEG1: Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

64.2		56.3	56.1	54.9	58.7	Decreased, 2009-2019	Not available	No change

QNVEG2: Percentage of students who ate vegetables two or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

27.2		24.2	20.2	20.1	25.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNVEG3: Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
12.2		12.4	8.9	7.9	10.4	Decreased, 2009-2019	Not available[§]	No change

QN76: Percentage of students who did not drink milk (during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
19.5		22.8	26.3	30.8	34.2	Increased, 2009-2019	Not available	No change

QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change 2017-2019
36.7		30.5	28.1	22.5	18.9	Decreased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| 11.3 | | 6.6 | 7.1 | 4.9 | 3.5 | Decreased, 2009-2019 | Not available[§] | No change |

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

| | | 12.9 | 15.5 | 11.3 | 13.0 | No linear change | Not available | No change |

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

| | | 34.5 | 30.5 | 34.2 | 24.9 | Decreased, 2013-2019 | Not available | Decreased |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Physical Activity

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN78: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		36.3	40.1	39.7	46.0	Increased, 2013-2019	Not available[§]	No change
QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		20.3	18.8	17.8	15.6	No linear change	Not available	No change
QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		18.0	19.0	21.8	21.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Physical Activity

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN79: Percentage of students who watched television 3 or more hours per day (on an average school day)

29.8		24.5	23.9	22.0	21.2	Decreased, 2009-2019	Not available[§]	No change

QN80: Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)

16.5		31.9	38.3	42.9	40.0	Increased, 2009-2019	Not available	No change

QN81: Percentage of students who attended physical education (PE) classes on 1 or more days (in an average week when they were in school)

33.4		38.3	36.9	42.6	46.4	Increased, 2009-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Physical Activity

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDLYPE: Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)								
25.4		24.4	18.2	24.9	25.3	No linear change	Not available[§]	No change
QN83: Percentage of students who had a concussion from playing a sport or being physically active (one or more times during the 12 months before the survey)								
				14.2	17.6	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Female
Other

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN86: Percentage of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, during the 12 months before the survey)

| | | | 73.2 | 72.4 | 70.5 | No linear change | Not available[§] | No change |

QNNODNT: Percentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)

| | | | 1.8 | 2.0 | 2.5 | No linear change | Not available | No change |

QN87: Percentage of students who had ever been told by a doctor or nurse that they had asthma

| 19.7 | | 26.5 | 20.6 | 25.9 | 24.7 | No linear change | Not available | No change |

QN88: Percentage of students who got 8 or more hours of sleep (on an average school night)

| | | | 25.5 | 20.4 | 21.7 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN90: Percentage of students who rarely or never wear a seat belt when driving (among students who drive a car)

		7.7	3.5	4.9	6.6	No linear change	Not available[§]	No change

QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)

				71.4	70.0	No linear change	Not available	No change

QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex

				4.5	4.2	No linear change	Not available	No change

QN95: Percentage of students who used electronic-vapor products mainly because a friend or family member used them

				9.6	9.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN97: Percentage of students who have ever participated in a program to help them quit using tobacco (among students who have used tobacco)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		6.5	10.7	7.6	12.9	No linear change	Not available[§]	No change

QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		2.7	1.3	2.4	4.8	No linear change	Not available	Increased

QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
			24.9	31.9	25.4	No linear change	Not available	No change

QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
			32.3	39.1	28.3	No linear change	Not available	Decreased

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)

			51.5	58.0	47.4	No linear change	Not available[§]	Decreased

QN102: Percentage of students who breathed the smoke from someone who was smoking tobacco products in the place where they worked (on at least one day during the 7 days before the survey, among students who worked during the 7 days before the survey)

			15.2	24.5	20.5	No linear change	Not available	No change

QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work

			89.8	90.1	81.5	Decreased, 2015-2019	Not available	Decreased

QN110: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma

12.9		16.3	12.3	15.2	16.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Site-Added

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN111: Percentage of students who have ever been taught by a nurse or doctor how to take care of or manage their asthma (among students who have ever had asthma)

		60.9	56.1	66.5	53.5	No linear change	Not available[§]	Decreased

QN112: Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not counting getting a spray-on tan], one or more times during the 12 months before the survey)

		17.8	17.5	19.2		No linear change	Not available	No change

QN113: Percentage of students who had a sunburn (counting even a small part of the skin turning red or hurting for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)

				58.9	63.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Female
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			
QN115: Percentage of students who most of the time or always get the kind of help they need (among students who report having felt sad, empty, hopeless, angry, or anxious)								
			28.0	30.1	23.6	No linear change	Not available[§]	No change
QN116: Percentage of students who ate dinner at home with at least one of their parents on four or more days (during the 7 days before the survey)								
			63.2	58.0	64.0	No linear change	Not available	No change
QN117: Percentage of students who strongly agree or agree that their teachers really care about them and give them a lot of encouragement								
			62.7	58.7	57.2	No linear change	Not available	No change
QN118: Percentage of students who participate in school activities one or more hours (such as sports, band, drama, or clubs, during an average week when they are in school)								
			71.0	66.8	71.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

| 9.4 | | 9.8 | 7.2 | 7.8 | 6.3 | Decreased, 2009-2019 | Not available[¶] | No change |

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

| 24.5 | | 17.4 | 17.5 | 14.3 | 15.1 | Decreased, 2009-2019 | Not available | No change |

QN10: Percentage of students who drove a car or other vehicle when they had been drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

| | | 8.8 | 6.5 | 5.3 | 4.4 | Decreased, 2013-2019 | Not available | No change |

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Injury and Violence

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019** [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN11: Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)								
		47.3	49.8	46.6	48.4	No linear change	Not available[¶]	No change
QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)								
14.9		23.6	23.4	21.8	19.0	Increased, 2009-2019	Not available	No change
QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)								
			5.8	4.3	4.1	No linear change	Not available	No change
QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)								
			4.6	4.6	5.3	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019[§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)								
				19.6	22.8	No linear change	Not available[¶]	No change
QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)								
7.3		8.5	7.5	9.8	10.0	No linear change	Not available	No change
QN22: Percentage of students who experienced physical dating violence (being physically hurt on purpose by someone they were dating or going out with [counting such things as being hit, slammed into something, or injured with an object or weapon] one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)								
		7.8	10.0	9.9	7.7	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)

| 23.9 | | 26.0 | 22.1 | 23.6 | 22.8 | No linear change | Not available[¶] | No change |

QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)

| | | | 17.3 | 19.9 | 19.5 | No linear change | Not available | No change |

QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)

| 25.6 | | 25.6 | 26.4 | 31.7 | 32.7 | Increased, 2009-2019 | Not available | No change |

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)

14.2		14.2	16.9	20.4	17.3	Increased, 2009-2019	Not available[¶]	No change

QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)

10.3		12.2	13.0	16.1	12.4	Increased, 2009-2019	Not available	Decreased

QN28: Percentage of students who attempted suicide (one or more times during the 12 months before the survey)

5.3		6.0	8.9	7.8	5.7	No linear change	Not available	No change

QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)

1.9		1.8	2.9	2.2	1.4	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Tobacco Use

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)

				8.9	8.0	No linear change	Not available[¶]	No change

QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)

19.4		14.4	12.0	9.9	7.2	Decreased, 2009-2019	Not available	No change

QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)

6.7		5.4	4.6	2.9	1.3	Decreased, 2009-2019	Not available	Decreased

QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)

5.6		3.9	3.5	2.1	1.0	Decreased, 2009-2019	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])

			41.7	40.8	52.0	Increased, 2015-2019	Not available[¶]	Increased

QN35: Percentage of students who currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo], on at least 1 day during the 30 days before the survey)

			22.2	11.5	24.2	No linear change	Not available	Increased

QNFREVP: Percentage of students who currently used electronic vapor products frequently (on 20 or more days during the 30 days before the survey)

			3.1	3.1	11.1	Increased, 2015-2019	Not available	Increased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Tobacco Use

Health Risk Behavior and Percentages						**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019** [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDAYEVP: Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)								
			2.0	2.5	8.1	Increased, 2015-2019	Not available[¶]	Increased
QNTB5: Percentage of students who currently smoked cigarettes or used electronic vapor products (on at least 1 day during the 30 days before the survey)								
			26.4	17.5	26.7	No linear change	Not available	Increased
QN36: Percentage of students who usually got their own electronic vapor products by buying them in a store (such as a convenience store, supermarket, discount store, gas station, or vape store, during the 30 days before the survey, among students who currently used electronic vapor products and who were aged <18 years)								
			14.3	6.8		No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Tobacco Use

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)

				6.1	6.1	No linear change	Not available[¶]	No change

QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)

12.1		11.7	12.2	9.4	4.9	Decreased, 2009-2019	Not available	Decreased

QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)

23.6		19.9	18.1	13.6	9.4	Decreased, 2009-2019	Not available	Decreased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN39: Percentage of students who tried to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products, ever during the 12 months before the survey, among students who used any tobacco products during the 12 months before the survey)

				2017	2019			
				37.9	49.2	Increased, 2017-2019	Not available[¶]	Increased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Alcohol and Other Drug Use

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019** [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips)								
17.9		18.9	15.3	18.4	14.5	No linear change	Not available[¶]	Decreased
QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)								
40.0		36.1	37.0	34.0	30.1	Decreased, 2009-2019	Not available	No change
QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey)								
				19.1	16.7	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Alcohol and Other Drug Use

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol)								
41.4		34.7	39.8	43.1	41.2	No linear change	Not available[¶]	No change
QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)								
18.4		17.9	14.7	19.2	13.1	No linear change	Not available	Decreased
QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)								
				12.4	22.3	Increased, 2017-2019	Not available	Increased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

White*
Alcohol and Other Drug Use

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)

| | | | | 2.9 | 1.5 | No linear change | Not available[¶] | No change |

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[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Sexual Behaviors

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019**[§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN58: Percentage of students who ever had sexual intercourse

| 43.9 | | 39.4 | 37.1 | 41.9 | 44.4 | No linear change | Not available[¶] | No change |

QN59: Percentage of students who had sexual intercourse for the first time before age 13 years

| 2.9 | | 2.2 | 2.9 | 1.9 | 3.7 | No linear change | Not available | No change |

QN61: Percentage of students who were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)

| 32.4 | | 30.5 | 27.6 | 33.0 | 34.2 | No linear change | Not available | No change |

QN62: Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)

| 23.7 | | 18.3 | 20.7 | 15.6 | 22.6 | No linear change | Not available | No change |

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*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Sexual Behaviors

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN63: Percentage of students who used a condom during last sexual intercourse (among students who were currently sexually active)								
57.5		56.4	56.3	51.6	58.2	No linear change	Not available[¶]	No change
QN64: Percentage of students who used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
30.0		17.9	24.4	26.4	31.1	No linear change	Not available	No change
QNIUDIMP: Percentage of students who used an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		2.3	4.6	4.0	4.8	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNSHPARG: Percentage of students who used a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active))								
		5.5	5.7	7.0	6.7	No linear change	Not available[¶]	No change
QNOTHHPL: Percentage of students who used birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		25.8	34.7	37.4	42.5	Increased, 2013-2019	Not available	No change
QNDUALBC: Percentage of students who used both a condom during last sexual intercourse and birth control pills; an IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra), or birth control ring (such as NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)								
		9.2	13.0	14.3	13.7	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Sexual Behaviors

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNBCNONE: Percentage of students who did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)								
6.5		13.7	9.3	10.8	6.6	No linear change	Not available[¶]	No change
QN84: Percentage of students who were ever tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)								
			12.6	6.3		Decreased, 2017-2019	Not available	Decreased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNOWT: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[¶]

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
12.4		15.0	12.2	15.5	15.7	No linear change	Not available	No change

QNOBESE: Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[¶]

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
14.1		14.5	12.2	15.8	17.5	No linear change	Not available	No change

QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
26.8		29.8	33.1	35.6	36.4	Increased, 2009-2019	Not available	No change

QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change
11.5		14.1	12.5	12.3	12.8	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.
[**]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019** [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
6.3		7.4	6.6	7.2	6.4	No linear change	Not available[¶]	No change
QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
55.1		54.2	52.4	49.2	49.9	Decreased, 2009-2019	Not available	No change
QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)								
25.5		23.1	22.8	22.1	17.2	Decreased, 2009-2019	Not available	Decreased

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

			Health Risk Behavior and Percentages			Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)

33.9		40.0	40.7	44.2	42.4	Increased, 2009-2019	Not available[¶]	No change

QN72: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey)

26.6		26.3	33.2	30.5	35.8	Increased, 2009-2019	Not available	No change

QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)

50.0		51.9	52.0	56.6	52.1	No linear change	Not available	No change

QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)

13.9		19.5	14.1	18.0	16.9	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNVEG0: Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| 5.0 | | 5.1 | 4.5 | 7.3 | 6.2 | No linear change | Not available[¶] | No change |

QNVEG1: Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| 65.6 | | 60.7 | 60.7 | 57.4 | 59.4 | Decreased, 2009-2019 | Not available | No change |

QNVEG2: Percentage of students who ate vegetables two or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| 29.7 | | 24.2 | 21.3 | 21.9 | 24.7 | Decreased, 2009-2019 | Not available | No change |

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[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	2011	2013	2015	2017	2019			

QNVEG3: Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

13.4		10.1	9.7	8.5	8.9	Decreased, 2009-2019	Not available[¶]	No change

QN76: Percentage of students who did not drink milk (during the 7 days before the survey)

12.9		15.6	17.9	22.3	26.0	Increased, 2009-2019	Not available	No change

QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

48.1		41.4	39.1	30.8	27.5	Decreased, 2009-2019	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

2009	2011	2013	2015	2017	2019	Linear	Quadratic	Change 2017-2019
16.1		12.2	11.2	7.5	7.1	Decreased, 2009-2019	Not available[¶]	No change

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

| | | 12.8 | 13.5 | 13.6 | 14.4 | No linear change | Not available | No change |

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

| | | 36.5 | 33.9 | 33.2 | 27.3 | Decreased, 2013-2019 | Not available | Decreased |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Physical Activity

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN78: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		47.5	48.7	48.1	50.2	No linear change	Not available[¶]	No change
QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		17.7	13.7	15.1	10.8	Decreased, 2013-2019	Not available	Decreased
QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		28.4	27.9	29.7	26.9	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Physical Activity

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019**[§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN79: Percentage of students who watched television 3 or more hours per day (on an average school day)

26.1		21.8	18.8	19.4	17.8	Decreased, 2009-2019	Not available[¶]	No change

QN80: Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)

20.7		32.5	37.8	42.4	42.9	Increased, 2009-2019	Not available	No change

QN81: Percentage of students who attended physical education (PE) classes on 1 or more days (in an average week when they were in school)

41.9		45.1	44.6	48.2	53.5	Increased, 2009-2019	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Physical Activity

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDLYPE: Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)								
33.3		33.0	24.8	29.1	29.0	No linear change	Not available[¶]	No change
QN83: Percentage of students who had a concussion from playing a sport or being physically active (one or more times during the 12 months before the survey)								
				14.9	17.2	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Other

		Health Risk Behavior and Percentages				**Linear Change**[†]	**Quadratic Change**[†]	**Change from 2017-2019** [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN86: Percentage of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, during the 12 months before the survey)								
			72.6	72.3	70.3	No linear change	Not available[¶]	No change
QNNODNT: Percentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)								
			2.2	2.3	2.8	No linear change	Not available	No change
QN87: Percentage of students who had ever been told by a doctor or nurse that they had asthma								
18.7		23.3	20.3	25.1	23.1	Increased, 2009-2019	Not available	No change
QN88: Percentage of students who got 8 or more hours of sleep (on an average school night)								
			27.2	22.2	22.5	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Site-Added

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN90: Percentage of students who rarely or never wear a seat belt when driving (among students who drive a car)

| | | 9.4 | 6.2 | 7.5 | 5.4 | No linear change | Not available[¶] | No change |

QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)

| | | | | 67.5 | 65.9 | No linear change | Not available | No change |

QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex

| | | | | 3.9 | 3.7 | No linear change | Not available | No change |

QN95: Percentage of students who used electronic-vapor products mainly because a friend or family member used them

| | | | | 7.4 | 9.3 | No linear change | Not available | No change |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Site-Added

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN97: Percentage of students who have ever participated in a program to help them quit using tobacco (among students who have used tobacco)

| | | 8.3 | 11.8 | 6.8 | 11.3 | No linear change | Not available[¶] | No change |

QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco

| | | 3.8 | 2.1 | 2.5 | 3.7 | No linear change | Not available | No change |

QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)

| | | | 28.0 | 30.9 | 24.6 | No linear change | Not available | No change |

QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)

| | | | 32.2 | 37.7 | 28.5 | No linear change | Not available | Decreased |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Site-Added

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)								
			50.4	53.1	43.1	No linear change	Not available[¶]	Decreased
QN102: Percentage of students who breathed the smoke from someone who was smoking tobacco products in the place where they worked (on at least one day during the 7 days before the survey, among students who worked during the 7 days before the survey)								
			22.9	25.9	21.1	No linear change	Not available	No change
QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work								
			86.6	87.8	77.5	Decreased, 2015-2019	Not available	Decreased
QN110: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma								
10.4		11.3	9.8	12.3	12.6	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

White*
Site-Added

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN111: Percentage of students who have ever been taught by a nurse or doctor how to take care of or manage their asthma (among students who have ever had asthma)

		52.7	53.5	57.3	54.4	No linear change	Not available[¶]	No change

QN112: Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not counting getting a spray-on tan], one or more times during the 12 months before the survey)

		14.0	13.9	15.5		No linear change	Not available	No change

QN113: Percentage of students who had a sunburn (counting even a small part of the skin turning red or hurting for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)

				63.8	71.1	Increased, 2017-2019	Not available	Increased

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

White*
Site-Added

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN115: Percentage of students who most of the time or always get the kind of help they need (among students who report having felt sad, empty, hopeless, angry, or anxious)								
			28.4	28.2	23.3	Decreased, 2015-2019	Not available[¶]	No change
QN116: Percentage of students who ate dinner at home with at least one of their parents on four or more days (during the 7 days before the survey)								
			65.3	60.8	64.7	No linear change	Not available	No change
QN117: Percentage of students who strongly agree or agree that their teachers really care about them and give them a lot of encouragement								
			61.1	63.4	57.2	No linear change	Not available	No change
QN118: Percentage of students who participate in school activities one or more hours (such as sports, band, drama, or clubs, during an average week when they are in school)								
			70.4	67.0	72.1	No linear change	Not available	No change

*Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

| 21.3 | | 14.6 | 11.6 | 13.7 | 18.4 | No linear change | Not available[¶] | No change |

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

| 26.0 | | 23.7 | 20.5 | 19.7 | 14.0 | Decreased, 2009-2019 | Not available | No change |

QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| 19.1 | | 12.2 | 14.8 | 9.8 | 14.9 | No linear change | Not available | No change |

QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

| | | | 3.5 | 2.5 | 4.7 | No linear change | Not available | No change |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)								
			8.4	8.5	3.8	No linear change	Not available[¶]	No change
QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)								
			15.2	26.5		Increased, 2017-2019	Not available	Increased
QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)								
8.6		16.6	10.1	8.0	5.2	No linear change	Not available	No change
QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)								
16.3		18.8	15.2	17.4	9.2	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)

		13.3	13.5	9.1		No linear change	Not available[¶]	No change

QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)

29.5		30.2	26.8	26.0	24.3	No linear change	Not available	No change

QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)

17.1		11.4	11.1	18.7	12.0	No linear change	Not available	No change

QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)

12.3		7.4	13.8	8.5	13.4	No linear change	Not available	No change

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[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	2011	2013	2015	2017	2019			
QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)								
				10.7	10.3	No linear change	Not available[¶]	No change
QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)								
15.7		11.3	5.9	5.0	3.3	Decreased, 2009-2019	Not available	No change
QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)								
5.0		4.3	2.9	1.1	0.0	Not available	Not available	Not available
QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)								
3.2		3.4	1.8	1.1	0.0	Not available	Not available	Not available

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	2011	2013	2015	2017	2019			
QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])								
			34.3	35.4	40.3	No linear change	Not available[¶]	No change
QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)								
			3.9	3.4		No linear change	Not available	No change
QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)								
17.2		15.2	10.6	8.1	6.7	Decreased, 2009-2019	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Black*
Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)

24.6		20.8	14.2	10.9	6.8	Decreased, 2009-2019	Not available[¶]	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Alcohol and Other Drug Use

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)								
				16.1	25.0	No linear change	Not available[¶]	No change
QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)								
				4.5	3.5	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	2011	2013	2015	2017	2019			

QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)

| 23.2 | | 28.6 | 22.9 | 29.3 | 28.4 | No linear change | Not available[¶] | No change |

QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)

| 20.2 | | 12.8 | 14.6 | 17.9 | 19.9 | No linear change | Not available | No change |

QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

| 10.4 | | 8.8 | 6.6 | 8.3 | 8.7 | No linear change | Not available | No change |

QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

| 58.6 | | 59.4 | 56.4 | 55.6 | 50.5 | No linear change | Not available | No change |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Black*
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

34.1		32.3	27.8	22.4	33.4	No linear change	Not available[¶]	No change

QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)

50.5		48.5	53.5	50.1	46.9	No linear change	Not available	No change

QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)

67.3		69.5	71.5	70.1	63.6	No linear change	Not available	No change

QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)

27.2		31.1	31.8	27.0	21.2	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN76: Percentage of students who did not drink milk (during the 7 days before the survey)

| 33.3 | | 29.8 | 35.8 | 41.3 | 30.8 | No linear change | Not available[¶] | No change |

QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| 29.6 | | 22.6 | 20.7 | 19.7 | 21.6 | Decreased, 2009-2019 | Not available | No change |

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| 13.8 | | 6.5 | 6.0 | 5.4 | 8.4 | Decreased, 2009-2019 | Not available | No change |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

| | | 19.7 | 21.3 | 16.7 | 17.6 | No linear change | Not available[¶] | No change |

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

| | | 33.7 | 18.9 | 31.3 | 33.1 | No linear change | Not available | No change |

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Site-Added

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)

			56.1	57.4		No linear change	Not available[¶]	No change

QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex

			8.4	3.4		No linear change	Not available	Decreased

QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco

	4.1	5.2	7.5	7.2		No linear change	Not available	No change

QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)

		31.9	30.9	25.8		No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[§]Based on t-test analysis, $p < 0.05$.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Black*
Site-Added

Health Risk Behavior and Percentages						Linear Change[†]	Quadratic Change[†]	Change from 2017-2019 [§]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)								
			32.3	33.9	23.3	No linear change	Not available[¶]	No change
QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)								
			43.8	39.5	30.2	Decreased, 2015-2019	Not available	No change
QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work								
			84.7	89.4	79.2	No linear change	Not available	No change

[*]Non-Hispanic.
[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[§]Based on t-test analysis, p < 0.05.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN8: Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		23.9	14.1	13.2	9.3	Decreased, 2013-2019	Not available[§]	No change

QN9: Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		35.7	28.6	22.5	28.9	No linear change	Not available	No change

QN12: Percentage of students who carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		25.1	24.3	19.1	24.3	No linear change	Not available	No change

QN13: Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
			8.0	4.8	9.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN15: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)

			11.1	11.0	17.6	No linear change	Not available[§]	No change

QN17: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)

			21.0	39.4	Increased, 2017-2019	Not available	Increased

QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)

		16.3	15.9	16.2	16.3	No linear change	Not available	No change

QN23: Percentage of students who were bullied on school property (ever during the 12 months before the survey)

		23.2	25.1	25.5	24.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Injury and Violence

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)

| | | | 17.0 | 21.2 | 19.2 | No linear change | Not available[§] | No change |

QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey)

| | | 42.7 | 38.0 | 37.4 | 43.1 | No linear change | Not available | No change |

QN26: Percentage of students who seriously considered attempting suicide (ever during the 12 months before the survey)

| | | 23.0 | 21.2 | 25.4 | 25.9 | No linear change | Not available | No change |

QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)

| | | 20.0 | 17.7 | 19.2 | 24.6 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Injury and Violence

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN28: Percentage of students who attempted suicide (one or more times during the 12 months before the survey)

		17.8	12.2	10.9	17.4	No linear change	Not available[§]	No change

QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)

		3.8	7.2	3.4	5.2	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Tobacco Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN31: Percentage of students who first tried cigarette smoking before age 13 years (even one or two puffs)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
				12.1	15.1	No linear change	Not available[§]	No change

QN32: Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		21.6	13.3	8.7	6.9	Decreased, 2013-2019	Not available	No change

QNFRCIG: Percentage of students who currently smoked cigarettes frequently (on 20 or more days during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		6.6	4.4	2.6	2.1	No linear change	Not available	No change

QNDAYCIG: Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)

2009	2011	2013	2015	2017	2019	Linear Change	Quadratic Change	Change from 2017-2019
		4.9	3.2	1.9	2.1	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Tobacco Use

	Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN34: Percentage of students who ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo])

			44.3	39.2	44.6	No linear change	Not available[§]	No change

QN35: Percentage of students who currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo], on at least 1 day during the 30 days before the survey)

			19.7	7.5	14.4	No linear change	Not available	No change

QNFREVP: Percentage of students who currently used electronic vapor products frequently (on 20 or more days during the 30 days before the survey)

			1.2	4.1	5.6	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Tobacco Use

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QNDAYEVP: Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)								
			1.2	2.1	2.7	No linear change	Not available[§]	No change
QNTB5: Percentage of students who currently smoked cigarettes or used electronic vapor products (on at least 1 day during the 30 days before the survey)								
			28.2	12.0	19.0	No linear change	Not available	No change
QN37: Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products [such as Copenhagen, Grizzly, Skoal, or Camel Snus], not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)								
			6.2	4.7		No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Tobacco Use

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN38: Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)								
		22.8	13.6	7.0	10.3	No linear change	Not available[§]	No change
QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)								
		28.3	22.1	11.7	11.0	Decreased, 2013-2019	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change*	Quadratic Change*	Change from 2017-2019 †
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips)

| | | 37.0 | 24.0 | 17.8 | 29.7 | No linear change | Not available§ | Increased |

QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)

| | | 49.2 | 34.1 | 27.0 | 30.0 | Decreased, 2013-2019 | Not available | No change |

QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours, on at least 1 day during the 30 days before the survey)

| | | | 8.6 | 16.9 | | No linear change | Not available | No change |

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
†Based on t-test analysis, $p < 0.05$.
§Not enough years of data to calculate.

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Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Alcohol and Other Drug Use

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)

		31.6	20.4	17.8	22.7	No linear change	Not available[§]	No change

QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)

				10.6	20.2	No linear change	Not available	No change

QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)

				4.1	10.0	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Sexual Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN58: Percentage of students who ever had sexual intercourse

| | | 52.2 | 40.0 | 39.8 | 53.0 | No linear change | Not available[§] | No change |

QN59: Percentage of students who had sexual intercourse for the first time before age 13 years

| | | 10.0 | 8.6 | 6.2 | 4.2 | No linear change | Not available | No change |

QN61: Percentage of students who were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)

| | | 41.3 | 28.2 | 29.8 | 35.2 | No linear change | Not available | No change |

QN84: Percentage of students who were ever tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)

| | | | | 21.3 | 14.6 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNOWT: Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

| | | 15.2 | 20.5 | 16.9 | 21.4 | No linear change | Not available[¶] | No change |

QNOBESE: Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)[§]

| | | 18.3 | 10.5 | 25.6 | 16.7 | No linear change | Not available | No change |

QN69: Percentage of students who did not drink fruit juice (100% fruit juices one or more times during the 7 days before the survey)

| | | 26.3 | 27.0 | 29.0 | 31.9 | No linear change | Not available | No change |

QN70: Percentage of students who did not eat fruit (one or more times during the 7 days before the survey)

| | | 19.3 | 9.5 | 17.9 | 11.6 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.
[¶]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNFR0: Percentage of students who did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

		7.8	4.3	12.4	10.2	No linear change	Not available[§]	No change

QNFR1: Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

		48.7	61.0	55.8	57.5	No linear change	Not available	No change

QNFR2: Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice, during the 7 days before the survey)

		23.9	25.2	29.9	20.5	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN71: Percentage of students who did not eat green salad (one or more times during the 7 days before the survey)								
		43.2	48.5	49.9	38.2	Decreased, 2013-2019	Not available[§]	No change
QN72: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey)								
		34.8	39.7	40.9	32.9	No linear change	Not available	No change
QN73: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey)								
		61.1	53.3	55.9	45.7	Decreased, 2013-2019	Not available	No change
QN74: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey)								
		24.8	22.2	24.4	22.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNVEG0: Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| | | 8.8 | 9.8 | 18.4 | 9.1 | No linear change | Not available[§] | No change |

QNVEG1: Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| | | 53.0 | 53.6 | 54.0 | 61.6 | No linear change | Not available | No change |

QNVEG2: Percentage of students who ate vegetables two or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| | | 23.6 | 18.8 | 25.9 | 28.3 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QNVEG3: Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)

| | | 16.5 | 7.8 | 14.3 | 11.8 | No linear change | Not available[§] | No change |

QN76: Percentage of students who did not drink milk (during the 7 days before the survey)

| | | 22.0 | 21.6 | 28.3 | 22.5 | No linear change | Not available | No change |

QNMILK1: Percentage of students who drank one or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| | | 34.3 | 29.8 | 27.4 | 24.2 | Decreased, 2013-2019 | Not available | No change |

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[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Weight Management and Dietary Behaviors

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNMILK3: Percentage of students who drank three or more glasses per day of milk (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)

| | | 6.8 | 8.3 | 5.4 | 4.1 | Decreased, 2013-2019 | Not available[§] | No change |

QN77: Percentage of students who did not eat breakfast (during the 7 days before the survey)

| | | 15.0 | 23.2 | 18.8 | 16.5 | No linear change | Not available | No change |

QNBK7DAY: Percentage of students who ate breakfast on all 7 days (during the 7 days before the survey)

| | | 26.6 | 28.2 | 26.6 | 22.5 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Physical Activity

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN78: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		33.0	38.7	44.4	41.4	No linear change	Not available[§]	No change
QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		20.5	19.8	16.5	20.6	No linear change	Not available	No change
QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)								
		19.0	23.0	25.2	26.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Physical Activity

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN79: Percentage of students who watched television 3 or more hours per day (on an average school day)

| | | 30.5 | 21.8 | 22.4 | 21.1 | No linear change | Not available[§] | No change |

QN80: Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)

| | | 34.6 | 31.2 | 38.5 | 33.8 | No linear change | Not available | No change |

QN81: Percentage of students who attended physical education (PE) classes on 1 or more days (in an average week when they were in school)

| | | 53.2 | 52.0 | 53.1 | 49.3 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Physical Activity

		Health Risk Behavior and Percentages				Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QNDLYPE: Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)

		25.6	18.9	27.7	19.3	No linear change	Not available[§]	No change

QN83: Percentage of students who had a concussion from playing a sport or being physically active (one or more times during the 12 months before the survey)

				16.4	19.4	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.
[†]Based on t-test analysis, p < 0.05.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Other

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN86: Percentage of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, during the 12 months before the survey)

| | | | 62.1 | 66.5 | 60.5 | No linear change | Not available[§] | No change |

QNNODNT: Percentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)

| | | | 2.4 | 3.4 | 3.0 | No linear change | Not available | No change |

QN87: Percentage of students who had ever been told by a doctor or nurse that they had asthma

| | | 24.8 | 18.1 | 34.5 | 17.3 | No linear change | Not available | Decreased |

QN88: Percentage of students who got 8 or more hours of sleep (on an average school night)

| | | | 31.5 | 17.7 | 18.1 | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			
QN91: Percentage of students who rode in a car or other vehicle driven by someone who was texting or e-mailing while driving (on at least 1 day during the 30 days before the survey)								
				54.8	59.7	No linear change	Not available[§]	No change
QN92: Percentage of students who have ever been given money, a place to stay, food, or something else of value in exchange for sex								
				12.6	9.7	No linear change	Not available	No change
QN95: Percentage of students who used electronic-vapor products mainly because a friend or family member used them								
				7.9	6.3	No linear change	Not available	No change
QN98: Percentage of students who reported that their school has special groups or classes for students who want to quit using tobacco								
	7.2	2.2	8.1	6.3	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Site-Added

	Health Risk Behavior and Percentages					Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	**2011**	**2013**	**2015**	**2017**	**2019**			

QN99: Percentage of students who reported that someone smoked tobacco products in the student's home while the student was there (on at least one day during the 7 days before the survey)

| | | | 24.0 | 28.9 | 21.7 | No linear change | Not available[§] | No change |

QN100: Percentage of students who rode in a vehicle where someone was smoking a tobacco product (on at least one day during the 7 days before the survey)

| | | | 25.8 | 24.3 | 26.0 | No linear change | Not available | No change |

QN101: Percentage of students who breathed the smoke from someone who was smoking tobacco products in indoor or outdoor public places (such as school buildings, stores, restaurants, stadiums, school grounds, parking lots, and parks, on at least one day during the 7 days before the survey)

| | | | 42.2 | 43.1 | 39.6 | No linear change | Not available | No change |

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[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN103: Percentage of students who think employers should never allow smoking in indoor areas in places where people work

| | | | 86.0 | 88.2 | 73.8 | No linear change | Not available[§] | Decreased |

QN110: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma

| | 8.8 | 9.9 | 15.1 | 7.3 | | No linear change | Not available | No change |

QN112: Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not counting getting a spray-on tan], one or more times during the 12 months before the survey)

| | | 13.6 | 8.8 | 21.1 | | No linear change | Not available | No change |

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.

Missouri High School Survey
10-year Trend Analysis Report

Hispanic
Site-Added

Health Risk Behavior and Percentages						Linear Change[*]	Quadratic Change[*]	Change from 2017-2019 [†]
2009	2011	2013	2015	2017	2019			

QN113: Percentage of students who had a sunburn (counting even a small part of the skin turning red or hurting for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)

				2017	2019	Linear	Quadratic	Change
				36.4	46.1	No linear change	Not available[§]	No change

QN116: Percentage of students who ate dinner at home with at least one of their parents on four or more days (during the 7 days before the survey)

			2015	2017	2019			
			61.6	51.3	53.7	No linear change	Not available	No change

QN117: Percentage of students who strongly agree or agree that their teachers really care about them and give them a lot of encouragement

			2015	2017	2019			
			57.6	69.6	53.1	No linear change	Not available	Decreased

QN118: Percentage of students who participate in school activities one or more hours (such as sports, band, drama, or clubs, during an average week when they are in school)

			2015	2017	2019			
			59.8	53.8	58.9	No linear change	Not available	No change

[*]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.
[†]Based on t-test analysis, $p < 0.05$.
[§]Not enough years of data to calculate.